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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,677	12/17/2001	Satoshi Machida	11106/5	2303

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EXAMINER

SPEARS, ERIC J

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022.677

Applicant(s)

MACHIDA, SATOSHI

Examiner

Eric J Spears

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: the specification uses the terminology "open" and "closed" with regard to circuits in a fashion which is directly opposite to that normally used. For example, on page 6, lines 10-11, the specification recites the switch 5 being open in order to transfer charge through it. Normally an open circuit or switch is equivalent to a broken connection and no charge could flow. It should be noted that from the specification as a whole the invention is believed to be understood. Appropriate correction is required.

Claim Objections

Claims 1 and 2 are objected to because of the following informalities: both claims recite the invention as a whole as a "photoelectric converter", but also recite the invention comprising an individual element called a "photoelectric converter" plus other things. The name of the apparatus in the preamble must have a broader name, such as "photoelectric device". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 1-3, where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "circuit is opened" in claim 1, lines 10-11 is used by the claim to mean "circuit is arranged so that a connection is made" (i.e. the "circuit is closed"), while the accepted meaning is "circuit is arranged so that a connection is not made." The specification and Claims use the terminology "open" and "closed" with regard to circuits in a fashion which is directly opposite to that normally used. For example, on page 6, lines 10-11, the specification recites the switch 5 being open in order to transfer charge through it. Normally an open circuit or switch is equivalent to a broken connection and no charge could flow. It should be noted that from the specification as a whole the invention is believed to be understood. The term is therefore indefinite because the specification does not clearly redefine the term.

Further regarding Claims 1-3, Claim 1, lines 8-16, Claim 2, lines 8-16, and Claim 3, lines 16-22, are "wherein" clauses which amount to method steps without reciting, method steps. For example, Claim 1, line 11, recites the limitation "after the charge transfer circuit is closed" without reciting the specific circuit being closed. Therefore, the

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phrase will be examined as reciting "the charge transfer circuit is then closed". Similarly the phrase "after the reset circuit is closed" on liens 14-15 will be examined as reciting "the reset circuit is then closed".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Bohm et al. (6,518,558).

Regarding Claim 1, Bohm teaches a photoelectric converter comprising, a photoelectric converter (1 and 4), an amplifier 41, a reset circuit 25, and a charge transfer circuit 27. The reset circuit is connected to the input of the amplifier.

Further regarding Claim 1, the wherein clause reads as intended use of the photoelectric converter as the claim does not recite a method of use. The device of Bohm is capable of performing as recited in the wherein clause.

Regarding Claim 2, Bohm teaches a photoelectric converter comprising, a photoelectric converter (1 and 4), an amplifier 41, a reset circuit 25, and a charge transfer circuit 7. The reset circuit is connected to the output of the photoelectric converter.

Further regarding Claim 2, the wherein clause reads as intended use of the photoelectric converter as the claim does not recite a method of use. The device of Bohm is capable of performing as recited in the wherein clause.

Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Krause (5,175,427).

Regarding Claim 3, Krause teaches a photoelectric converter comprising, a photoelectric converter portion 1, a first amplifier 2, a reference signal transfer circuit a1, a reference signal holding circuit b1, a second reference signal transfer circuit c1, a light signal transfer circuit a2, a light signal holding circuit b2, a second light signal transfer circuit c2, and a second amplifier 7.

Further regarding Claim 3, the wherein clause reads as intended use of the photoelectric converter as the claim does not recite a method of use. The device of Krause is capable of performing as recited in the wherein clause (Col. 2, lines 3-17).

Claim 3 is rejected under 35 U.S.C. 102(e) as being anticipated by Kawahara et al. (6,429,413)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding Claim 3, Kawahara teaches a photoelectric converter comprising, a photoelectric converter portion 2, a first amplifier 6, a reference signal transfer circuit (part of 8), a reference signal holding circuit (part of 8), a second reference signal transfer circuit 10, a light signal transfer circuit (part of 11), a light signal holding circuit (part of 11), a second light signal transfer circuit 13, and a second amplifier 16.

Further regarding Claim 3, Kawahara teaches the method recited in the wherein clause (Col. 4, lines 28-34).

Double Patenting

Claim 3 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 9, and 15 of U.S. Patent No. 6,429,413. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of Claim 3 would have been obvious to one of ordinary skill in the art over the invention of Claim 15 of Pat No. 6,427,413.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Gurunathan et al. (6,548,802) teaches a device similar to that of Claims 1 and 2.

Gurunathan et al. (2002/0153475) teaches a device similar to that of Claims 1 and 2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Spears whose telephone number is (703) 306-0033. The examiner can normally be reached on Monday-Friday from 10:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on (703) 308-4852. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


STEPHONE ALLEN
PRIMARY EXAMINER

EJS
05/13/03